

Title (en)

METHOD FOR TRANSFERRING ENERGY BETWEEN AT LEAST TWO POWER CELLS IN A CONTROLLABLE ENERGY STORE

Title (de)

VERFAHREN ZUM UMLADEN VON ENERGIE ZWISCHEN MINDESTENS ZWEI ENERGIESPEICHERZELLEN IN EINEM STEUERBAREN ENERGIESPEICHER

Title (fr)

PROCÉDÉ DE TRANSFERT D'ÉNERGIE ENTRE AU MOINS DEUX ÉLÉMENTS D'UN ACCUMULATEUR D'ÉNERGIE CONTRÔLABLE

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Application

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Abstract (en)

[origin: WO2012038208A2] The invention relates to a method for transferring energy between at least two power cells (5) in a controllable energy store (2) used for controlling and supplying electric power to an n-phase electric machine (1). The energy store (2) has n power supply branches (3-1, 3-2, 3-3), each of which includes at least two serially connected energy storage modules (4). Each energy storage module comprises at least one electric power cell (5) having an associated controllable coupling unit (6) and is connected to one respective phase (U, V, W) of the electric machine (1). In a charging phase, all coupling units (6-11) of the energy storage modules (4-11) to be used as a source of energy are controlled in such a way that the associated power cells (5-11) are connected to the respective power supply branch (3-1). All coupling units (6-31 to 6-3m) located in a power supply branch (3-3) of power cells (5-3m) to be charged are controlled in such a way that the associated power cells (5-31 to 5-3m) are bridged. In a freewheeling phase following the charging phase, all coupling units (6-3m) associated with power cells (5-3m) to be charged are controlled in such a way that the associated power cells (5-3m) are connected to the respective power supply branch (3-3).

IPC 8 full level

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